

0590
0913

10



OIPE

RAW SEQUENCE LISTING

DATE: 09/20/2002

PATENT APPLICATION: US/10/054,968

TIME: 10:57:13

Input Set : N:\Crif3\RULE60\10054968.raw

Output Set: N:\CRF4\09202002\J054968.raw

1 <110> APPLICANT: NEUTEC PHARMA PLC
 2 <120> TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF INFECTIONS OF GRAM
 3 POSITIVE
 4 COCCI
 5 <130> FILE REFERENCE: PM 259204
 6 <140> CURRENT APPLICATION NUMBER: 10/054,968
 7 <141> CURRENT FILING DATE: 2002-01-25
 9 <150> PRIOR APPLICATION NUMBER: US/09/214,307
 10 <151> PRIOR FILING DATE: 1999-01-04
 12 <150> PRIOR APPLICATION NUMBER: PCT/GB97/01830
 13 <151> PRIOR FILING DATE: 1997-07-07
 14 <150> PRIOR APPLICATION NUMBER: GB9614274.0
 15 <151> PRIOR FILING DATE: 1996-07-06
 16 <160> NUMBER OF SEQ ID NOS: 15
 17 <170> SOFTWARE: PatentIn Ver. 2.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 540
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Enterococcus faecium
 23 <400> SEQUENCE: 1
 24 atggttgatt gggttatggac atccgttttg aacagtagat tcacttatca gccgaataca 60
 25 ccatttgaac aaagagcctt atttgacatc aataagaaga tcaaaggaaa cagttatact 120
 26 gcattagtag ggcataccgg aagcgggaaa tcaaccttac ttcagcattt gaatgcgctt 180
 27 gttaagccaa caagcggtag agtccatatt ggagaacgag atattcagcc ggatacggat 240
 28 aataagaatt taaagcccat ccgaaaaaaa gttggcatcg tctttcagtt tccagaagca 300
 29 cagctattcg aagaaacggt agcaaaagac attgctttcg gtcctaaaaa ctttggtgtc 360
 30 agcgaagaag aagcactagt cctagcaaaa gaaacattag aacaagttgg gctggatgaa 420
 31 agctatttgg aacgttcgcc atttgaactt tcaggagggc aaatgcgtag agtagcaatc 480
 32 gctggtgtgc ttgccatgag gccggaagta cttgtattgg atgaaccaac ggcaggactt 540
 34 <210> SEQ ID NO: 2
 35 <211> LENGTH: 180
 36 <212> TYPE: PRT
 37 <213> ORGANISM: Enterococcus faecium
 38 <400> SEQUENCE: 2
 39 Met Val Asp Trp Leu Trp Thr Ser Val Leu Asn Ser Arg Phe Thr Tyr
 40 1 5 10 15
 41 Gln Pro Asn Thr Pro Phe Glu Gln Arg Ala Leu Phe Asp Ile Asn Lys
 42 20 25 30
 43 Lys Ile Lys Gly Asn Ser Tyr Thr Ala Leu Val Gly His Thr Gly Ser
 44 35 40 45
 45 Gly Lys Ser Thr Leu Leu Gln His Leu Asn Ala Leu Val Lys Pro Thr
 46 50 55 60
 47 Ser Gly Thr Val His Ile Gly Glu Arg Asp Ile Gln Pro Asp Thr Asp

RAW SEQUENCE LISTING

DATE: 09/20/2002

PATENT APPLICATION: US/10/054,968

TIME: 10:57:13

Input Set : N:\Crf3\RULE60\10054968.raw

Output Set: N:\CRF4\09202002\J054968.raw

```

48          65          70          75          80
49      Asn Lys Asn Leu Lys Pro Ile Arg Lys Lys Val Gly Ile Val Phe Gln
50          85          90          95
51      Phe Pro Glu Ala Gln Leu Phe Glu Glu Thr Val Ala Lys Asp Ile Ala
52          100          105          110
53      Phe Gly Pro Lys Asn Phe Gly Val Ser Glu Glu Glu Ala Leu Val Leu
54          115          120          125
55      Ala Lys Glu Thr Leu Glu Gln Val Gly Leu Asp Glu Ser Tyr Leu Glu
56          130          135          140
57      Arg Ser Pro Phe Glu Leu Ser Gly Gly Gln Met Arg Arg Val Ala Ile
58          145          150          155          160
59      Ala Gly Val Leu Ala Met Arg Pro Glu Val Leu Val Leu Asp Glu Pro
60          165          170          175
61      Thr Ala Gly Leu
62          180
64 <210> SEQ ID NO: 3
65 <211> LENGTH: 7
66 <212> TYPE: PRT
67 <213> ORGANISM: Enterococcus sp.
68 <220> FEATURE:
69 <221> NAME/KEY: UNSURE
70 <222> LOCATION: (1)
71 <223> OTHER INFORMATION: Generic epitope - any amino acid
72 <221> NAME/KEY: UNSURE
73 <222> LOCATION: (3)
74 <223> OTHER INFORMATION: Generic epitope - any amino acid
W--> 75 <400> 3
W--> 76      Xaa Gly Xaa Gly Lys Ser Thr
77          1          5
79 <210> SEQ ID NO: 4
80 <211> LENGTH: 7
81 <212> TYPE: PRT
82 <213> ORGANISM: Enterococcus faecium
83 <400> SEQUENCE: 4
84      Thr Gly Ser Gly Lys Ser Thr
85          1          5
87 <210> SEQ ID NO: 5
88 <211> LENGTH: 7
89 <212> TYPE: PRT
90 <213> ORGANISM: Enterococcus faecium
91 <400> SEQUENCE: 5
92      Leu Leu Gln His Leu Asn Ala
93          1          5
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 5
97 <212> TYPE: PRT
98 <213> ORGANISM: Enterococcus faecium
99 <400> SEQUENCE: 6
100      Lys Val Gly Ile Val

```

RAW SEQUENCE LISTING

DATE: 09/20/2002

PATENT APPLICATION: US/10/054,968

TIME: 10:57:13

Input Set : N:\Crf3\RULE60\10054968.raw

Output Set: N:\CRF4\09202002\J054968.raw

```

101          1          5
103 <210> SEQ ID NO: 7
104 <211> LENGTH: 6
105 <212> TYPE: PRT
106 <213> ORGANISM: Enterococcus faecium
107 <400> SEQUENCE: 7
108      Phe Gly Pro Lys Asn Phe
109          1          5
111 <210> SEQ ID NO: 8
112 <211> LENGTH: 8
113 <212> TYPE: PRT
114 <213> ORGANISM: Enterococcus faecium
115 <400> SEQUENCE: 8
116      Arg Val Ala Ile Ala Gly Val Leu
117          1          5
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 1457
121 <212> TYPE: DNA
122 <213> ORGANISM: Staphylococcus aureus
123 <400> SEQUENCE: 9
124      atttaaagaa attattaata aaaaaattga attaggatgt acagctatgg ccattttttaa 60
125      atatatagag aaaaagggtt atgaaggtaa atatactatt ctacgagaat actgtaaaaa 120
126      taaaaaacia aatgagacta aaaaagcaac tatacgcgta gaaactaatc ccggtatagc 180
127      tgc tcaagta gactggaaag aagatatggg aatgcatgat aagtttggca gaacttatca 240
128      attcaacatc tttcttttac ttctacacta ttcaaaaatg aagtatatca cattaacttg 300
129      ggatagaaaa caagatacct tatttgaatg tttaaaagac gcttttgaat acaccgaagg 360
130      ggttccaaaa gaaatctggt tcgataatat gagaactgta gttgatcgac ctagaacaca 420
131      atataaaaaa gtcgtcttta ataatttatt ttatcaattt agtaaggatg ccaactttga 480
132      acctattgct tgtagaccct atcgtcctca aacaaaaggg tctggtgaat cattagctaa 540
133      atttggtgaa cagcgtttaa gaccatacga ttatgaattt tatgatgctg tagaacttat 600
134      tgggctagta aacgatttat gtcacgaatt gaatcactta gaaatttcac aagcaacaga 660
135      acaacgacct atcgacgttt tcaattatga agaaaaagaa catttaaatt cttttaatgc 720
136      caagttacta gatacttaca tcgaaaatga gtgtataaga atcgtttcta aagaatcgat 780
137      gattaacttt agaaaaggta aatactcggg acctactaaa tacattgggtg aagaagtaca 840
138      agtgatattc aataattcta ctgatgaatt gctgatttat tatgatgggtg aattaataag 900
139      acggcataat ctatccgaaa gaaaatttaa ttatatcggt gaagatatga gtgaaatatt 960
140      aaaatcagat gtatttaaac ataaggatga caaagaaatt cttacgtata tagaaaattc 1020
141      attattactg tatgacgaaa tttaggagga ctttcgatga atacgaacca tcaaaaatta 1080
142      cttaataact ttgaaatatt aaaactaaaa aaattcaaag attattatcc aaactatatt 1140
143      gaattacttt ctaaaaatga gaaatcttta actgaaatat tgattgattt aacggaaaaa 1200
144      gaaatagaat atcaatcaga attaaaattt aaacgtgctg tgaattcagc acgtttccct 1260
145      aaaataaaat atttacatga ttttgatttc atgtttcaac ctaagtataa atcaacaaga 1320
146      aatactcact ttaaaatcta tgcatttttt agaagatagt ataaatattt gtttctagta 1380
147      atagtgggtg tggtaaaaca cacctagcaa tctcattagg aatagaggca tgttagcaaa 1440
148      atataaagac tagatcc 1457
150 <210> SEQ ID NO: 10
151 <211> LENGTH: 347
152 <212> TYPE: PRT
153 <213> ORGANISM: Staphylococcus aureus

```

RAW SEQUENCE LISTING

DATE: 09/20/2002

PATENT APPLICATION: US/10/054,968

TIME: 10:57:13

Input Set : N:\Crif3\RULE60\10054968.raw

Output Set: N:\CRF4\09202002\J054968.raw

```

154 <400> SEQUENCE: 10
155   Phe Lys Glu Ile Ile Asn Lys Lys Ile Glu Leu Gly Cys Thr Ala Met
156     1           5           10           15
157   Ala Ile Phe Lys Tyr Ile Glu Lys Lys Gly Tyr Glu Gly Lys Tyr Thr
158     20           25           30
159   Ile Leu Arg Glu Tyr Cys Lys Asn Lys Lys Gln Asn Glu Thr Lys Lys
160     35           40           45
161   Ala Thr Ile Arg Val Glu Thr Asn Pro Gly Ile Ala Ala Gln Val Asp
162     50           55           60
163   Trp Lys Glu Asp Met Val Met His Asp Lys Phe Gly Arg Thr Tyr Gln
164     65           70           75           80
165   Phe Asn Ile Phe Leu Tyr Val Leu His Tyr Ser Lys Met Lys Tyr Ile
166     85           90           95
167   Thr Leu Thr Trp Asp Arg Lys Gln Asp Thr Leu Phe Glu Cys Leu Lys
168     100          105          110
169   Asp Ala Phe Glu Tyr Thr Glu Gly Val Pro Lys Glu Ile Trp Phe Asp
170     115          120          125
171   Asn Met Arg Thr Val Val Asp Arg Pro Arg Thr Gln Tyr Lys Lys Val
172     130          135          140
173   Val Phe Asn Asn Leu Phe Tyr Gln Phe Ser Lys Asp Ala Asn Phe Glu
174     145          150          155          160
175   Pro Ile Ala Cys Arg Pro Tyr Arg Pro Gln Thr Lys Gly Ser Val Glu
176     165          170          175
177   Ser Leu Ala Lys Phe Val Glu Gln Arg Leu Arg Pro Tyr Asp Tyr Glu
178     180          185          190
179   Phe Tyr Asp Ala Val Glu Leu Ile Gly Leu Val Asn Asp Leu Cys His
180     195          200          205
181   Glu Leu Asn His Leu Glu Ile Ser Gln Ala Thr Glu Gln Arg Pro Ile
182     210          215          220
183   Asp Val Phe Asn Tyr Glu Glu Lys Glu His Leu Asn Ser Phe Asn Ala
184     225          230          235          240
185   Lys Leu Leu Asp Thr Tyr Ile Glu Asn Glu Cys Ile Arg Ile Val Ser
186     245          250          255
187   Lys Glu Ser Met Ile Asn Phe Arg Lys Gly Lys Tyr Ser Val Pro Thr
188     260          265          270
189   Lys Tyr Ile Gly Glu Glu Val Gln Val Ile Phe Asn Asn Ser Thr Asp
190     275          280          285
191   Glu Leu Leu Ile Tyr Tyr Asp Gly Glu Leu Ile Arg Arg His Asn Leu
192     290          295          300
193   Ser Glu Arg Lys Phe Asn Tyr Ile Val Glu Asp Met Ser Glu Ile Leu
194     305          310          315          320
195   Lys Ser Asp Val Phe Lys His Lys Asp Asp Lys Glu Ile Leu Thr Tyr
196     325          330          335
197   Ile Glu Asn Ser Leu Leu Leu Tyr Asp Glu Ile
198     340          345
200 <210> SEQ ID NO: 11
201 <211> LENGTH: 100
202 <212> TYPE: PRT
203 <213> ORGANISM: Staphylococcus aureus

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/054,968

DATE: 09/20/2002

TIME: 10:57:13

Input Set : N:\Crf3\RULE60\10054968.raw

Output Set: N:\CRF4\09202002\J054968.raw

```

204 <400> SEQUENCE: 11
205 Met Asn Thr Asn His Gln Lys Leu Leu Asn Asn Phe Glu Ile Leu Lys
206      1              5              10              15
207 Leu Lys Lys Phe Lys Asp Tyr Tyr Pro Asn Tyr Ile Glu Leu Leu Ser
208      20              25              30
209 Lys Asn Glu Lys Ser Leu Thr Glu Ile Leu Ile Asp Leu Thr Glu Lys
210      35              40              45
211 Glu Ile Glu Tyr Gln Ser Glu Leu Lys Phe Lys Arg Ala Val Asn Ser
212      50              55              60
213 Ala Arg Phe Pro Lys Ile Lys Tyr Leu His Asp Phe Asp Phe Met Phe
214      65              70              75              80
215 Gln Pro Lys Tyr Lys Ser Thr Arg Asn Thr His Phe Lys Ile Tyr Ala
216      85              90              95
217 Phe Phe Arg Arg
218      100
220 <210> SEQ ID NO: 12
221 <211> LENGTH: 7
222 <212> TYPE: PRT
223 <213> ORGANISM: Staphylococcus aureus
224 <400> SEQUENCE: 12
225 Ala Gln Val Asp Trp Lys Glu
226      1              5
228 <210> SEQ ID NO: 13
229 <211> LENGTH: 10
230 <212> TYPE: PRT
231 <213> ORGANISM: Staphylococcus aureus
232 <400> SEQUENCE: 13
233 Ala Phe Glu Tyr Thr Glu Gly Val Pro Lys
234      1              5              10
236 <210> SEQ ID NO: 14
237 <211> LENGTH: 6
238 <212> TYPE: PRT
239 <213> ORGANISM: Staphylococcus aureus
240 <400> SEQUENCE: 14
241 Thr Lys Ser Gly Val Glu
242      1              5
244 <210> SEQ ID NO: 15
245 <211> LENGTH: 9
246 <212> TYPE: PRT
247 <213> ORGANISM: Staphylococcus aureus
248 <400> SEQUENCE: 15
249 Ser Gly Val Gly Lys Thr His Leu Ala
250      1              5

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/054,968

DATE: 09/20/2002
TIME: 10:57:14

Input Set : N:\Crf3\RULE60\10054968.raw
Output Set: N:\CRF4\09202002\J054968.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 1,3

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/054,968

DATE: 09/20/2002

TIME: 10:57:14

Input Set : N:\Crf3\RULE60\10054968.raw

Output Set: N:\CRF4\09202002\J054968.raw

L:75 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3

L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0